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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/642,190	08/18/2000	Chul-Woo Park	40164/DBP/Y35	6792

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EXAMINER

BERCK, KENNETH A

ART UNIT PAPER NUMBER

2879

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Appli ation No.

09/642,190

Applicant(s)

PARK CHUL-WOO

Examin r

Ken A Berck

Art Unit

2879

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1-16 is rejected under 35 U.S.C. 102(b) as being anticipated by Mohri et al. (US 5643034).

Regarding claims 1 and 13, Mohri discloses (fig 1-3) a vacuum fluorescent display with a pair of substrates (15, 1) spaced apart from each other with a predetermined distance, forming a vacuum cell by interposing a side glass, a plurality of filaments (12) mounted within the vacuum cell to emit thermal electrons under the application of voltage, a plurality of anode electrodes (4) formed at one of the substrates, each anode having a conductive layer (4), a phosphor layer (5) and a control electrode (7) surrounding each anode electrode, the control electrode is formed with a single-layered structure and is positioned directly on an insulating layer (6) on one of the pair of substrates (column 4, lines 1-3).

Regarding claims 2 and 14, Mohri discloses the control electrode is formed with a metallic material having a high electrical conductivity (column 11, lines 15-33).

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Regarding claims 3 and 15, Mohri discloses the control electrode is formed with a metallic material selected from the group consisting of stainless steel, platinum, silver and copper (column 11, lines 15-33).

Regarding claims 4 and 16, Mohri discloses each anode electrode is formed with a plurality of segments, and the control electrode surrounds each segment of each anode (fig 2).

Regarding claim 5, Mohri discloses (fig 2) the control electrode (7) is formed with a unitary part.

Regarding claim 6, Mohri discloses the control electrode comprises a main control part (7) and a subsidiary control part (9).

Regarding claim 7, Mohri discloses (fig 8) the main control part surrounds each segment of each anode and the subsidiary control part is formed at a top end portion of the main control part with a unitary part.

Regarding claim 8, Mohri discloses (figs 8, 9) the subsidiary control part is formed with an extension where the top end portion of the main control part is extended towards each segment of the anode perpendicular to the main control part.

Regarding claim 9, Mohri discloses (fig 8) the subsidiary control part is formed with a connector, the connector interconnecting top ends of the main control part such that the connector crosses each segment of the anode electrode.

Regarding claim 10, Mohri discloses (fig 8) a subsidiary control electrode (9) surrounding the control electrode.

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Regarding claim 11, Mohri discloses (fig 8) the subsidiary control electrode is formed with a mesh grid.

Regarding claim 12, Mohri discloses the control electrode and subsidiary are provided at some of the plurality of anode electrodes.

Response to Arguments

Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken A Berck whose telephone number is (703)305-7984. The examiner can normally be reached on Mon-Fri 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703)305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

kab



Joseph Williams
Joseph Williams